

AS-9

Notice of Allowability	Application No.	Applicant(s)	
	09/724,615	STROBEL ET AL.	
	Examiner	Art Unit	
	Monique R Jackson	1773	

-- The MAILING DATE of this communication appears in the cover sheet with the correspondence address--
 All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Response sent 11/26/02.
 2. ☒ The allowed claim(s) is/are 1-12.
 3. ☒ The drawings filed on 28 November 2000 are accepted by the Examiner.
 4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: _____.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - (a) ☐ The translation of the foreign language provisional application has been received.
 6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#9/C

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the top margin (not the back) of each sheet. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1 <input type="checkbox"/> Notice of References Cited (PTO-892) | 2 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 4 <input checked="" type="checkbox"/> Interview Summary (PTO-413), Paper No. <u>9</u> |
| 5 <input type="checkbox"/> Information Disclosure Statements (PTO-1449), Paper No. _____ | 6 <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 7 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Roger R. Tamte on December 16, 2002.

The application has been amended as follows:

In claim 7, line 1, the term "flame" has been inserted before the term "treatment".

In claim 9, line 1, the term "flame" has been inserted before the term "treated".

In claim 12, line 1, the term "flame" has been inserted before the term "treatment".

2. The following is an examiner's statement of reasons for allowance: The closest prior art does not teach or render obvious a method of modifying a polymeric substrate by exposing the substrate to a flame supported by a fuel mixture that includes at least one sulfur-containing compound that functions as a fuel substitute or the flame treated polymer substrate thereby produced. Further, the closest prior art does not teach or render obvious a polymeric substrate having a flame treated surface that comprises a surface comprising at least one oxidized sulfur-containing chemical group and at least one nitroso or nitrosoamine chemical group or a surface comprising at least one oxidized sulfur-containing chemical group and at least one unoxidized sulfur-containing chemical group. The closest prior art with respect to the instant product, Angelopoulos et al (USPN 5,997,997), teaches a substrate comprising a polymeric dielectric surface that has been heat treated to provide oxidized sulfur-containing chemical groups and

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unoxidized sulfur-containing chemical groups on the dielectric surface. However, Angelopoulos et al does not teach or render obvious that the dielectric surface comprising the oxidized and unoxidized sulfur-containing chemical groups is flame treated or that the dielectric surface comprises at least one nitroso or nitrosoamine chemical group and at least one oxidized sulfur-containing chemical group. Further, with regards to the flame treating process, the closest prior art, Asakura et al, teaches various methods of surface treating a polymeric substrate including corona discharge treatment, low temperature plasma treatment, and flame treatment, wherein the treatment process can be performed in various atmospheres utilizing various gases including sulfur dioxide and hydrogen sulfide. However, as argued by the Applicant, it is apparent that the disclosed gases correspond to the atmosphere in which the treatment process is conducted not the gases utilized to fuel the flame in a flame treatment process, particularly given that methane, one of the most common fuel gases utilized in the art, is not disclosed. Therefore, it would not have been obvious to one skilled in the art at the time of the invention based on the invention taught by Asakura et al to utilize a sulfur containing compound in conjunction with a flame treating process to treat the surface of a polymeric substrate, nor would it have been obvious that the heat treated product produced by Asakura et al would have the same structure as the instant flame treated invention.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monique R Jackson whose telephone number is 703-308-0428.

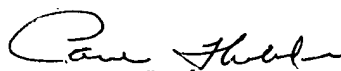
The examiner can normally be reached on Mondays-Thursdays, 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul J Thibodeau can be reached on 703-308-2367. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



mrj
December 16, 2002



Paul Thibodeau
Supervisory Patent Examiner
Technology Center 1700